



# Italian Ministry of Health

## GUIDELINES FOR PROPOSALS EVALUATION

For full proposals, the following evaluation criteria apply.

**B.1 Ordinary projects** (first 2 digit code project RF and GR), co-funded projects (first 2 digit code projects CO) and projects involving Italian Researchers abroad (first 2 digit code project PE) - the assessment is based on the following criteria:

CRITERIA	SCORE RANGE
<ul style="list-style-type: none"> <li>Scientific quality, scientific relevance of the proposed research and feasibility of the objectives</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Novelty, originality and transferability</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Methodology and development strategy of the project (in detail over the 3 years of the project), preliminary data and bibliographic references</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Merit of the applicant (general information and contact details), scientific activity (based on the curriculum vitae and publication records presented by the applicant – 5 best articles, 5 articles related to the topic, taking into consideration: the IF of the scientific journals where the articles were published, the number of citations from the year of publication to year of the request for funding, and the h-index) and the 5 most recent publications. With reference to the projects involving Italian Researchers abroad, the data of the Italian researcher operating abroad are relevant too. Expertise of the group of researchers</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Facilities, infrastructures and equipment to be used for the implementation of the project. Economic adequacy and detailed financial plan. Economic consistency of the project.</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Does this project relate to products or ideas already covered by an industrial patent by the co-financing company or otherwise subject to the rights of a legal entity other than the corresponding Institutional Authority?</li> </ul>	Yes/No
<ul style="list-style-type: none"> <li>Overall evaluation (half page)</li> </ul>	Text
<ul style="list-style-type: none"> <li>Final score</li> </ul>	Sum

\*Maximum value=1; Minimum value=9. Scores are admitted in fractions of 0,5 points.

**B.2 Only Network programs** (first 3 digit code projects NET): the assessment is based on the following criteria:

CRITERIA	SCORE RANGE
<ul style="list-style-type: none"> <li>Scientific quality, scientific relevance of the proposed research and feasibility of the objectives</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Novelty, originality and transferability</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Methodology and development strategy of the project (in detail over the 3 years of the project), preliminary data and bibliographic references</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Merit of the applicant (general information and contact details), scientific activity (based on the curriculum vitae and publication records presented by the applicant – 5 best articles, 5 articles related to the topic, taking into consideration: the IF of the scientific journals where the articles were published, the number of citations from the year of publication to year of the request for funding, and the h-index) and the 5 most recent publications.</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Facilities, infrastructures and equipment to be used for the implementation of the project. Economic adequacy and detailed financial plan. Economic consistency of the project. 1-9</li> </ul>	
<ul style="list-style-type: none"> <li>Time requested for the results/benefits to be extended to the final patients</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Capacity of integration and involvement of the National Health System in the territory and territorial dimension</li> </ul>	1-9
<ul style="list-style-type: none"> <li>Overall evaluation (half page)</li> </ul>	Text
<ul style="list-style-type: none"> <li>Final score</li> </ul>	Sum

\*Maximum value=1; Minimum value=9. Scores are admitted in fractions of 0,5 points.

The scores indicate the following with respect to the criterion under examination:

Score	
1	<b>Outstanding.</b> The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.
1,5	<b>Excellent plus.</b>
2	<b>Excellent.</b> The proposal successfully addresses the criterion very well, although some minor improvements are still possible.
2,5	<b>Excellent minus.</b>
3	<b>Very good to excellent.</b> The proposal addresses the criterion very well, although certain improvements are still possible.
3,5	<b>Very good plus.</b>
4	<b>Very good.</b> The proposal addresses the criterion well, although certain improvements are still possible.
4,5	<b>Good plus.</b>
5	<b>Good.</b> The proposal addresses the criterion well, although improvements would be necessary.
5,5	<b>Good minus.</b>
6	<b>Fair to Good.</b> While the proposal broadly addresses the criterion, there are some weaknesses.
6,6	<b>Fair plus.</b>
7	<b>Fair.</b> While the proposal broadly addresses the criterion, there are significant weaknesses.
7,5	<b>Fair minus.</b>
8 -	<b>Weak.</b> The criterion is addressed in an inadequate manner or there are serious inherent weaknesses.
8,5	<b>Poor to Weak.</b>
9	<b>Poor.</b> The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.

The following considerations on the score system are intended to assist the reviewer in the evaluation of the most sensitive criteria.

## On the Scientific quality, scientific relevance of the proposed research and feasibility of the objectives

**Score 1-2:** this score reflects an excellent application, which fulfills the following criteria:

- The proposed study is in line with the mission of the Ministry of Health and has clear repercussions on biomedical sciences.
- The project is of outstanding scientific quality; it is built on solid experimental evidence and is focused on a highly relevant scientific subject.
- The research plan is realistic and highly feasible.
- The scientific/intellectual merits of the proposed research are clear, convincing and compelling.
- The general design, including time schedule, is optimal for implementing the project.
- The project is very well written and presented, and it is fully understandable
- Problems, planned solutions and current state of the art are thoroughly examined
- The project has high translational potential.

With reference to the young researchers, the following criteria should be added:

- The execution of the project is clearly instrumental for the candidate's career progression as it lays foundation for a solid and independent research line and future grant applications, and has full potential to generate important publications.

With reference to the projects involving Italian Researchers operating abroad the following criteria should be added:

- The team members are appropriate in terms of availability and complementarities of all the relevant expertise, and in how the different roles and responsibilities are distinguished.
- The cooperation leads to added value for the research and can lead to transfer of knowledge between applicants.
- The three-year collaboration can lead to the establishment of new research ties.

**Score 3-4:** the application is very good, yet fails to fulfill important criteria listed in the previous paragraph. The proposal requires adjustments.

**Score 5-9:** the application suffers from critical flaws.

## On the Novelty, originality and transferability

**Score 1-2:** this score reflects an excellent application, which fulfills the following criteria:

- The project has potential for the creation of new knowledge, exciting new ideas and approaches, directions for research and understanding of health and illness.
- The project includes use of novel technologies/methodologies, and/or innovative application of existing methodologies/technologies in new areas.
- The project can be regarded as unconventional, and it challenges prevalent opinion or practice.
- The project has obvious translational potential; for instance, upon its successful execution, it will provide essential information to unravel physiopathological processes important for therapy development, or will lay foundation to develop future therapeutic strategies, or will provide new diagnostic tools, or healthcare equipment.
- The project will certainly provide findings that can be translated into health gains and differences in score are only determined by the relevance of the outcome. For instance, results impacting directly healthcare should be seen more positively.

**Score 3-4:** the project presents a good grade of novelty and originality. Despite some potential, translation is not easily achievable; amendments to the research plan and/or additional experimental evidence will successfully overcome weaknesses.

**Score 5-9:** The project has low novelty and originality, and low or not translational potential.

## On the Methodology and development strategy of the project (in detail over the 3 years of the project), preliminary data and bibliographic references

**Score 1-2:** this score reflects an extremely well designed and described experimental plan.

- The methodology is appropriate for the project objectives and fully compatible with the candidate's skills. The application is therefore realistic and highly feasible within the proposed timeframe.
- The project takes into consideration any potential problems, and alternative strategies and benchmarks for success are presented.
- The project takes advantage of particularly powerful technical resources, for instance particular models, or unique samples repositories, or cutting edge technologies.
- Involvement of vertebrate animals: the use of animals and the appropriateness of the species and number proposed is justified; the veterinary care is adequate; procedures for limiting discomfort, distress, pain and injuries to that which is unavoidable will be implemented.

**Score 3-4:** the section suffers from some flaws; for instance, the profile of the applicant might not be fully compatible with the proposed methodology, thus compromising feasibility of the project. Alternatively, the project might rely on sub-optimal models.

**Score 5-9:** the project is unrealistic, or it is based on obsolete techniques and inappropriate models. Overall, the methodology is weak.

## On the Merit of the applicant

**Score 1-2:** the applicant is internationally competitive and demonstrates scientific independence and thinking.

- She/he has sufficient research experience, expertise, level of independence and scientific network for implementation of the proposed project.
- There is ability to successfully disseminate research findings

With reference to young researchers the following criteria should be added:

As a general observation, the reviewer should consider that, at early career stages, bibliometric parameters as the h-index and the number of publication are not fully reliable. Evaluation of the investigator's profile should be therefore based on careful assessment of multiple factors.

Part of the resources are dedicated to investigators younger than 40 and therefore covers researcher from very early stages of career to more advanced ones (e.g. < 3 vs. >5 years from PhD); the reviewer should be aware of these differences and balance his rating accordingly. This funding mechanism is focused on young investigators and the review process should also offer the candidate a chance to improve her/his curriculum and to increase possibilities of success in a resubmission. The reviewers therefore urged to clearly describe the weaknesses in the profile and provide constructive suggestions.

- Compatibly with her/his early career development, she/he can already be considered a specialist in her/his field, as reflected by a coherent and logical publication record.
- She/he figures as first or last corresponding author in one or more publications and, possibly, she/he has already secured independent funding.
- Mobility and periods of training in research centers with international prestige should be positively considered.

In this class, score differences (i.e. 1 vs. 2) are determined by the level of the publications and/or the prestige of the received funding. As an example for US based reviewers, candidates in this category should fulfill the requirements to compete for NIH transition grants (e.g. K22, K99/R00, etc.).

**Score 3-4:** the applicant has a very good record, but fails to fulfill essential requirements highlighted in the previous point.

With reference to young researchers, for instances, the publication record does not indicate that the candidate is a specialist in her/his field, or might not reflect independent thinking yet, as evidenced by deficiency of first or last authorship manuscripts. The grant is focused on young investigators, thus lack of funding should not excessively penalize applicants at very early career stages (i.e. within 5 years from PhD) . The profile of the candidates in this category is very promising and ideally the applicant will be able to access the top class in a next resubmission following the reviewers' recommendations. In this class, score differences are determined by the extent of effort required to successfully improve the candidate's profile.

**Score 5-9:** the applicant's profile needs substantial improvement and the candidate should dedicate particular attention to overcome prominent weaknesses in his/her CV.

## On the Facilities, infrastructures and equipment available. Economic adequacy and detailed financial statement. Economic consistency of the project.

### Score 1-3: FEASIBLE AND ECONOMICALLY CONSISTENT

- The project includes the availability and accessibility of relevant personnel, skills, equipment, facilities/infrastructures and any other necessary resources.
- Materials, patients and methods are adequate and well adapted to the hypothesis or research questions; environment is suitable for carrying out the proposed research.
- The requested budget is highly appropriate

**Score 4-5: PARTLY FEASIBLE** – the availability and accessibility of personnel, skills, equipment and facilities/infrastructure are not completely adequate; the requested budget is appropriate.

**Score 6-7: HARDLY FEASIBLE** - the proposed infrastructure, equipment and fieldwork are hardly sufficient; the requested budget is marginally appropriate

**Score 8-9: NOT FEASIBLE** - the proposed infrastructure, equipment and field work are insufficient; the requested budget is inappropriate

## On the time requested for the results/benefits to be extended to the final patients (only NETWORK Projects – first 2 digit code project =NET)

**Score 1-3:** the results of the project will be immediately extended to the final patients

**Score 4-7:** the results of the project will be extended to the final patients within a year from the conclusion of the project

**Score 8-9:** the results of the project will be extended to the final patients after at least a year from the conclusion of the project

## On the Capacity of integration and involvement of the National Health System in the territory and territorial dimension (only NETWORK Projects – first 2 digit code project =NET)

**Score 1:** Outstanding capacity of integration and involvement of other structures

**Score 2:** Excellent capacity of integration and involvement

**Score 3-4:** Very good capacity of integration and involvement

**Score 5-6:** Good capacity of integration and involvement

**Score 7:** Fair capacity of integration and involvement

**Score 8:** Weak capacity of integration and involvement

**Score 9:** Poor capacity of integration and involvement